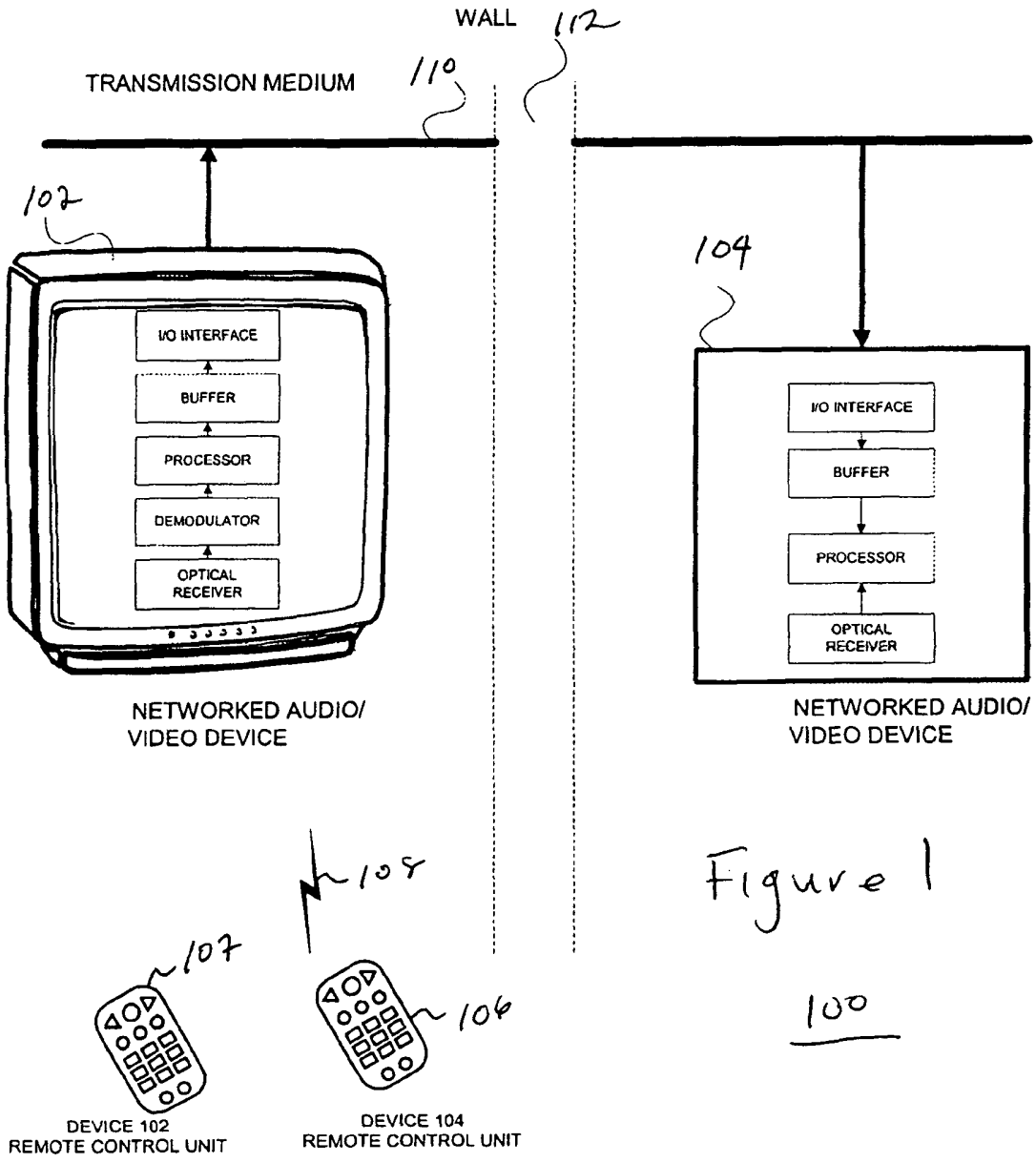

WALL
112
TRANSMISSION MEDIUM
110
102
I/O INTERFACE
BUFFER
PROCESSOR
DEMODULATOR
OPTICAL RECEIVER
NETWORKED AUDIO/ VIDEO DEVICE
104
I/O INTERFACE
BUFFER
PROCESSOR
OPTICAL RECEIVER
NETWORKED AUDIO/ VIDEO DEVICE
108
107
106
DEVICE 102 REMOTE CONTROL UNIT
DEVICE 104 REMOTE CONTROL UNIT

Figure 1

100

Figure 2 200

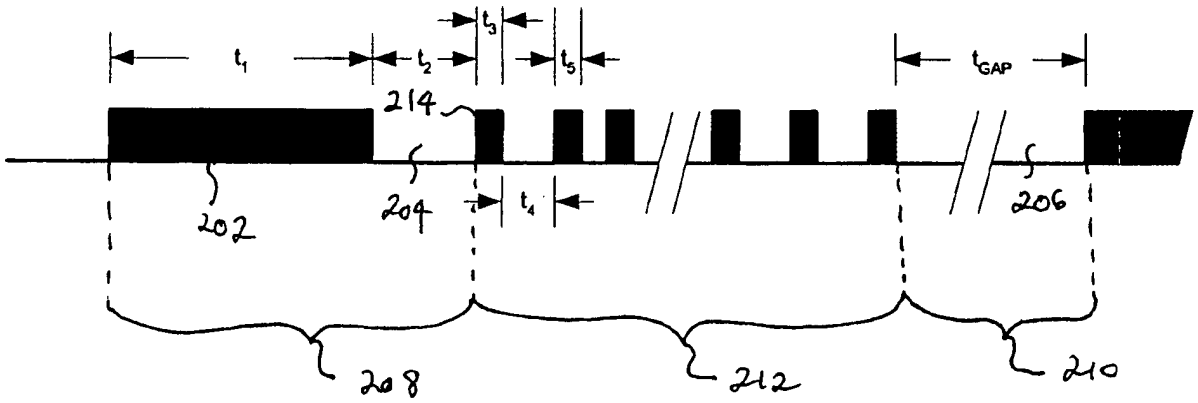


Figure 3

300

Width	Value	Type
t_1	9.4 milliseconds	pulse
t_2	4.5 milliseconds	gap
t_3	0.7 milliseconds	Pulse
t_4	1.5 milliseconds	gap
t_5	0.7 milliseconds	pulse
⋮	⋮	⋮

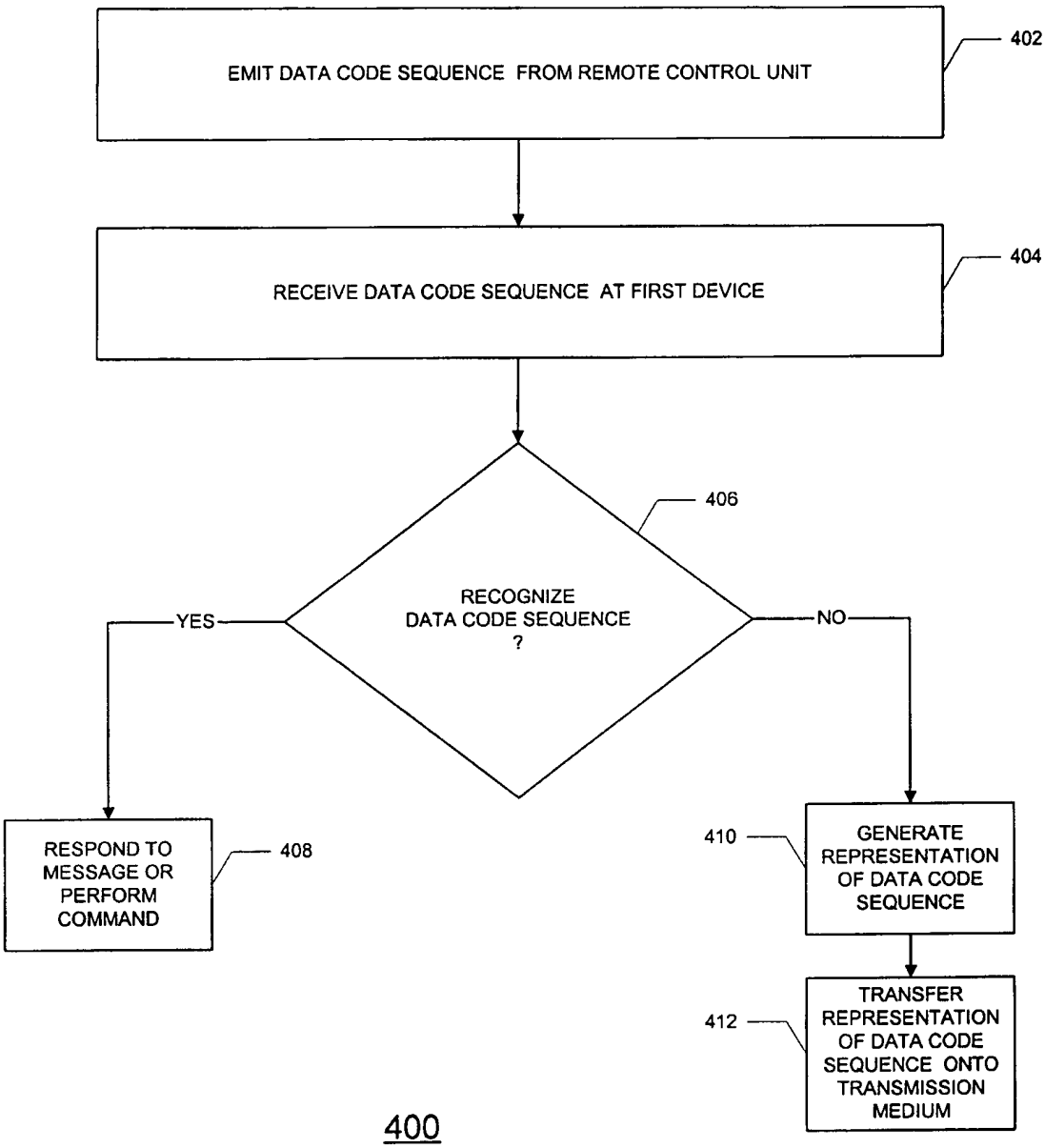
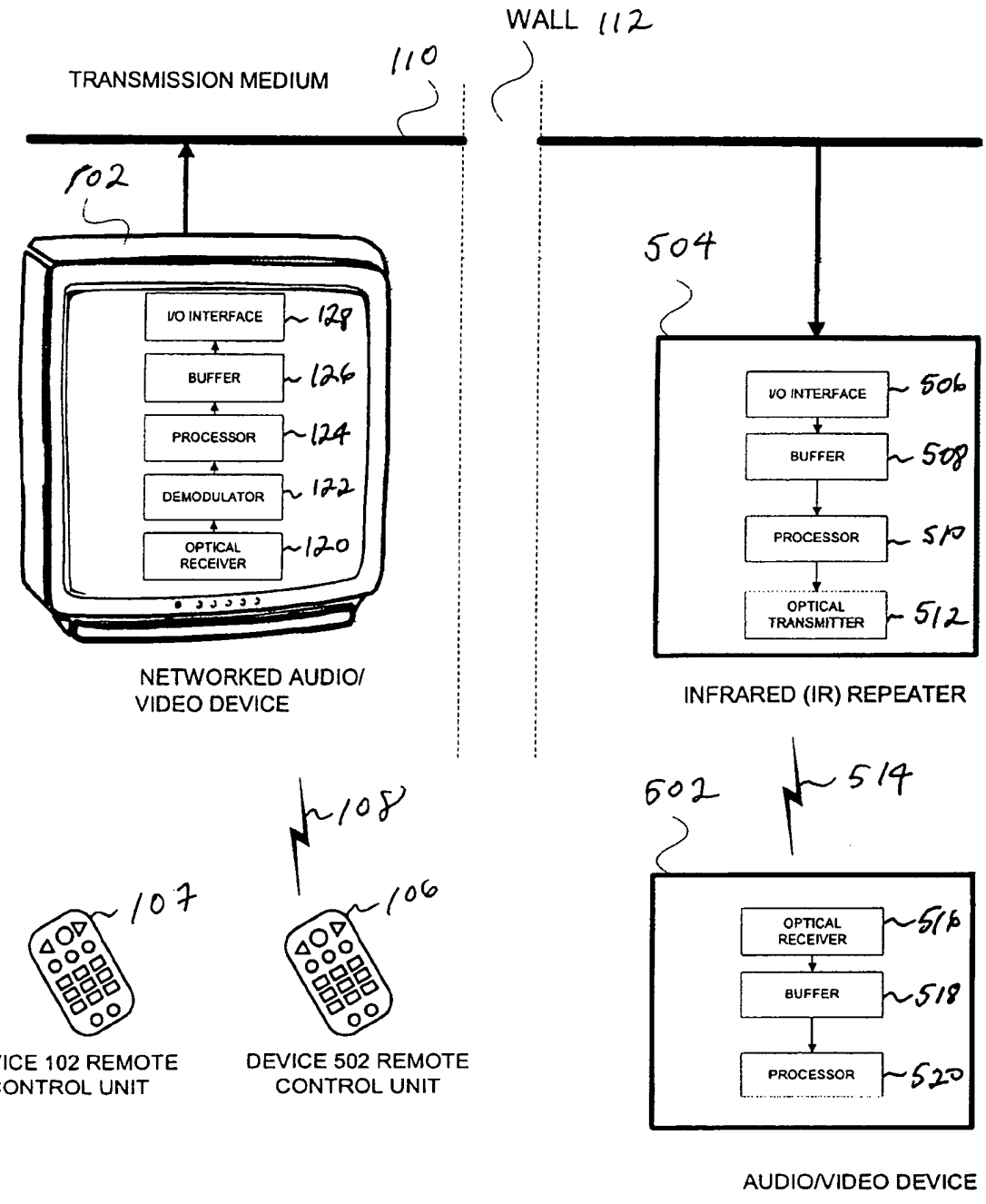

EMIT DATA CODE SEQUENCE FROM REMOTE CONTROL UNIT
402
RECEIVE DATA CODE SEQUENCE AT FIRST DEVICE
404
406
RECOGNIZE DATA CODE SEQUENCE ?
YES
NO
RESPOND TO MESSAGE OR PERFORM COMMAND
408
410
GENERATE REPRESENTATION OF DATA CODE SEQUENCE
412
TRANSFER REPRESENTATION OF DATA CODE SEQUENCE ONTO TRANSMISSION MEDIUM
400

FIGURE 4

Figure 5 500


WALL 112
TRANSMISSION MEDIUM
110
102
I/O INTERFACE
128
BUFFER
126
PROCESSOR
124
DEMODULATOR
122
OPTICAL RECEIVER
120
NETWORKED AUDIO/ VIDEO DEVICE
504
I/O INTERFACE
506
BUFFER
508
PROCESSOR
510
OPTICAL TRANSMITTER
512
INFRARED (IR) REPEATER
108
107
106
DEVICE 102 REMOTE CONTROL UNIT
DEVICE 502 REMOTE CONTROL UNIT
502
514
OPTICAL RECEIVER
516
BUFFER
518
PROCESSOR
520
AUDIO/VIDEO DEVICE

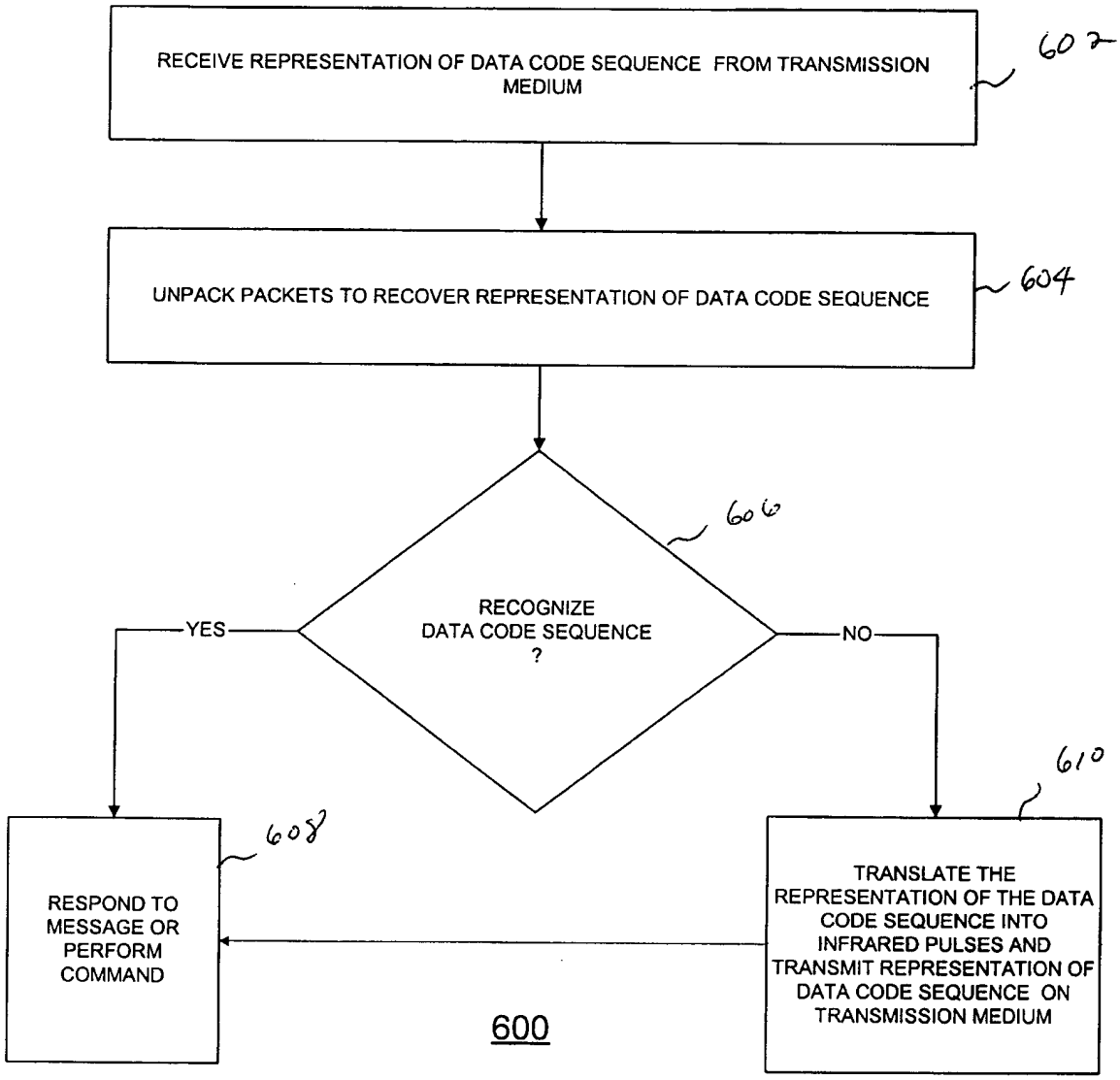

RECEIVE REPRESENTATION OF DATA CODE SEQUENCE FROM TRANSMISSION MEDIUM
602
UNPACK PACKETS TO RECOVER REPRESENTATION OF DATA CODE SEQUENCE
604
RECOGNIZE DATA CODE SEQUENCE ?
606
YES
NO
RESPOND TO MESSAGE OR PERFORM COMMAND
608
TRANSLATE THE REPRESENTATION OF THE DATA CODE SEQUENCE INTO INFRARED PULSES AND TRANSMIT REPRESENTATION OF DATA CODE SEQUENCE ON TRANSMISSION MEDIUM
610
600

FIGURE 6